

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	406	228/2.3.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/03/01 13:21
L2	121	1 and friction near3 weld\$3 and (spindle or chuck) same (force or torque)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/03/01 13:21
L3	637	228/2.1.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/03/01 13:22
L4	1131	228/112.1.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/03/01 13:23
L5	38	(1 or 3 or 4) and friction near3 weld \$3 and (spindle or chuck) same (absorb\$3 or receiv \$3 or transfer\$3) near5 (thrust or force or torque)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/03/01 13:24
S1	860	228/112.1.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 14:15

S2	131	(friction near3 weld \$3) and frame and (spindle or mandrel or head) same drive and mova\$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 14:22
S3	19	S1 and S2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 14:23
S4	2	("3536242").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/02/05 14:34
S5	3	("3536242").URPN.	USPAT	OR	ON	2008/02/05 14:35
S6	9	US-3954215-\$.DID. OR US-8141718-\$.DID. OR US-4733814-\$.DID. OR US-3377009-\$.DID. OR US-3439853-\$.DID. OR US-4030658-\$.DID. OR DE-19990617-\$.DID. OR US-1331018-\$.DID.	US-PGPUB; USPAT; USOCR	OR	ON	2008/02/05 15:06
S7	1	(friction near3 weld \$3) and different near3 size near5 (spindle or mandrel or head) same drive	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 16:24
S8	11	semmlinger-wolfgang.in. or fischer-otmar.in. or zott-gunter.in. or huber-rudolf.in.	USPAT	OR	ON	2008/02/05 16:44
S9	13	(friction near3 weld \$3) and support near5 pin same (spindle or mandrel or head) same drive	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 16:49
S10	28	(friction near3 weld \$3) and support near5 pin same lock \$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 17:26

S11	27	S10 not S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 17:27
S12	1	S11 and S1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 17:27
S13	463	228/2.1.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 17:27
S14	1	S11 and S13	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/05 17:27
S15	28	(friction near3 weld \$3) and support near5 pin same lock \$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/07 17:14
S16	0	(friction near3 weld \$3 near3 (machine or apparatus or system or device or tool)) and support near5 lock\$3 near5 (opening or hole)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 08:13
S17	0	(friction near3 weld \$3 near3 (machine or apparatus or system or device or tool)) and spindle near5 lock\$3 near5 (opening or hole)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 08:18

S18	13	(friction near3 weld \$3 near3 (machine or apparatus or system or device or tool)) and spindle same lock\$3 same (opening or hole)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 08:19
S19	24	(friction near3 weld \$3 near3 (machine or apparatus or system or device or tool)) and (workpiece or (weld near2 piece)) near5 (remov\$3 or replac\$3or mount \$3) near5 spindle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 08:31
S20	77	(friction near3 weld \$3 near3 (machine or apparatus or system or device or tool)) and (chuck or (workpiece near2 mount or holder)) near5 (remov\$3 or replac \$3or mount\$3) near5 spindle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 08:34
S21	23	(friction near3 weld \$3 near3 (machine or apparatus or system or device or tool)) and (chuck or (workpiece near2 mount or holder)) near5 (remov\$3 or replac \$3or mount\$3) near5 spindle and lock\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 08:35
S22	3	(("3542383") or ("4663823")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/02/11 08:52
S23	1	(("4733814")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/02/11 09:34
S24	1	(("3954215")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/02/11 10:08

S25	7	(friction near3 weld\$3) and different near3 size near5 (spindle or mandrel or head)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 13:03
S26	16	(friction near3 weld\$3) and size near5 spindle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 13:04
S27	5	"3612386"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 14:15
S28	11	"3439853"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/11 15:22
S29	793	chuck same removable same spindle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/15 11:10
S30	12993	l1and (friction near3 weld\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/15 11:10
S31	6	S29 and (friction near3 weld\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/02/15 11:11
S32	891	228/112.1.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:23

S33	482	228/2.1.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:23
S34	10	(S32 or S33) and (friction or rotary) near5 weld\$3 and (relie\$4 releas\$3 liberat\$3 alleviat\$3) near10 (forg\$3 or force or torque)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:23
S35	0	(S32 or S33) and (friction or rotary) near5 weld\$3 and improv\$3 near5 spindle same (force or torque)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:39
S36	7	(friction or rotary) near5 weld\$3 and improv\$3 near5 spindle same (force or torque)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:39
S37	579	(friction or rotary) near5 weld\$3 and (relie\$4 releas\$3 liberat\$3 alleviat\$3) near10 (forg\$3 or force or torque)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:43
S38	7	(friction or rotary) near5 weld\$3 and (relie\$4 releas\$3 liberat\$3 alleviat\$3) near5 (forg\$3 or force or torque) near10 spindle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:44
S39	4	("3712528").URPN.	USPAT	OR	ON	2008/08/07 09:47
S40	0	friction near2 weld \$3 and support near5 spindle near5 (reliev\$3 or releas\$3) near5 (force or torque)	USPAT	OR	ON	2008/08/07 09:53

S41	1	friction near2 weld\$3 and support near5 spindle near5 (reliev\$3 or releas\$3) near5 (force or torque)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:54
S42	4	friction near3 weld\$3 and spindle and (levin.in. or penkov.in.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/07 09:57

**EAST Search History (I nterference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L7	637	228/2.1,112.1.ccls.	USPAT; UPAD	OR	ON	2011/03/01 13:25
L8	235	228/2.3.ccls.	USPAT; UPAD	OR	ON	2011/03/01 13:25
L9	0	("7" or "8") and friction near2 weld\$3 and (headstock and spindle and (bridge or plate or block) and (force or torque)).clm.	USPAT; UPAD	OR	ON	2011/03/01 13:27
L10	0	friction near2 weld\$3 and (headstock and spindle and (bridge or plate or block) and (force or torque)).clm.	USPAT; UPAD	OR	ON	2011/03/01 13:27
L11	0	friction near2 weld\$3 and (headstock and spindle and (absorb\$3 or receiv\$3 or transfer \$4) same (force or torque)).clm.	USPAT; UPAD	OR	ON	2011/03/01 13:28
L12	5	friction near2 weld\$3 and (headstock and spindle and (bridge or plate or block) same (force or torque))	USPAT; UPAD	OR	ON	2011/03/01 13:28
L13	9	(l7 or l8) and friction near2 weld\$3 and ((headstock or chuck or spindle) and (bridge or plate or block) and (force or torque)).clm.	USPAT; UPAD	OR	ON	2011/03/01 13:30

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